AP PHYSICS –C COURSE INFORMATION

AP Physics-C is a calculus-based physics course. This course is more rigorous, math-wise, than the AP Physics-B course, which is algebra-based. The “B” course has more topics than the “C” course, but the “C” course goes into much more depth. The “C” course is comparable to “engineering” physics college courses taken by engineering, physics, and often, computer majors.

AP Physics-C has two parts: 1) Mechanics and 2) Electricity & Magnetism (known as E & M). There are two AP Physics tests: one for Mechanics and one for E & M. You may take one or both. Since the AP Physics program is new, and upon the advice of numerous Physics teachers who have done this, we will focus primarily on preparing for the Mechanics exam. If we finish in a timely manner, we will do as much E & M as possible to prepare you.

You will have to work very hard in this class. Stay up-to-date, and ask questions when needed. Do NOT fall behind! Remember also, that success for you, as well as for this new program as a whole, depends very much on your efforts. If you do well, you can be proud for yourself, as well as leaving a legacy of success for this program for future students.

Information regarding homework will be posted, as often as possible, on the eBoard for this class.

We will use Webassign for most homework problems. There is a forum there, for discussions.

You may contact me by email at [hhsphysics@snip.net](mailto:hhsphysics@snip.net) which I check daily at home.

My school email is [nmichaelsen@hammontonps.org](mailto:nmichaelsen@hammontonps.org) but I only check it during school.

# REQUIRED MATERIALS

Class notebook: 3-ring binder is preferred, since homework will be collected.

Lab notebook: Bound, quadrille-type (graph paper). Cost is approximately $18.

Book cover For textbook (*Physics* by Halliday, Resnick, and Walker)

Pencils: For doing homework problems. You will be making mistakes and corrections… a lot. I recommend a mechanical pencil with refills, to save you from sharpening the pencil all the time. And you will be re-sharpening…a lot!

Pens: For lab book; blue or black pen only. No white-out or correction tape.

Dry-Erase Marker: Fine-point type, for group work on whiteboards.

Scotch Tape: For putting graphs, etc. into your lab notebook, keep a roll of tape handy.

**CLASSROOM RULES**

You are expected to act as professionals in this class. This includes

* Punctuality – being on time to class; having work completed on time.
* Respecting and showing common courtesy to others in the classroom
* Being responsible for, and completing your own work (no copying or cheating).
* Being responsible for your absences.
* Being responsible for your learning. (ask questions, get help when needed!)
* Professional conduct about the lesson and the classroom equipment.
  + Professionalism includes remaining in your seat and remaining on task until the period ends.
  + Non-professional behavior will result in a call home and/or Parent/Teacher/Student Conference.

**GRADING:** The grading will be as follows:

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| Tests: | 40% | * Unit tests * A quarterly exam, covering all material studied during the marking period |
| Quizzes: | 20% | * 1-2 quizzes per chapter |
| Homework: | 20% | * Homework is to be labeled (chapter, problem #), all work shown (equation, substitution, answer), and the final answer circled, underlined, or highlighted. Your work must be readable. * Rule in class: I can go over homework problems, but be selective—they require a lot of time. You may not write down the solution I show you---pay attention, because you must complete the problem on your own! That is the only way you learn this material. * Homework will be collected on the day of the unit test. * It may also be collected, occasionally, during the unit, especially if it looks like people aren’t doing it. Don’t wait until the last minute----you’ll be sorry. The problems can be very time-consuming. * Webassign grades (online homework service). |
| Lab work: | 20% | * Lab notebook must be properly kept, and will be graded. * Occasional formal lab reports or presentations (Power Point, verbal) |